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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,884	04/16/2001	Arthur H. Sarkissian		4549

47888 7590 02/21/2007  
HEDMAN & COSTIGAN P.C.  
1185 AVENUE OF THE AMERICAS  
NEW YORK, NY 10036

EXAMINER
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LAO, LUN YI

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/835,884	<b>Applicant(s)</b> SARKISSIAN, ARTHUR H.	
	<b>Examiner</b> LUN-YI LAO	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 89-105 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 89-105 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on October 12, 2002 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of 1) the arrangement of alphanumerical keys on Figs.12 and 13; for example, a first surround key does not include key-values of "TAB, SHIFT, and CTRL(see original Fig. 3a) and 2) a protrusion(26) which fits into groove(28).
2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on July 2, 2003 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of 1) the arrangement of alphanumerical keys on Figs.12 and 13; for example, a first surround key does not include key-values of "TAB, SHIFT, and CTRL(see original Fig. 3a) and 2) a protrusion(26) which fits into groove(28); 2) the actuators(19, 34 and 49) in each surrounding keys showed in figures 3a, 3b, 3c, the original specification only disclose the actuator(3) in the middle key and an actuator(11) in surrounding keys(see figures 1c, 1d and paragraph 47).

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3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on June 17, 2003 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of the keyboard configuration showed in figures 10-11 are different from the original figure 3a.

The substitute specification filed on July 2, 2003, July 1, 2003 and June 3, 2003 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: a substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2" has been used to designate both an optional bordering wall and actuating construct; "3" has been used to designated both a key surrounding,

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outermost circumference points and spring; etc.. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which

it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 89-97, 99 and 100-105 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The original specification fail to disclose the recitation of "a third surround keys" as cited in claims 89, 92, 95, 99 and 103. The specification only disclose a first and second surround keys each surrounding a plurality of middle keys(see figures 1a-3a and 45 and 50).

The original specification fail to disclose how a display built in applicant's keyboard to depicting a middle key and a key-surround key in claims 100-102.

8. The amendment filed on October 15, 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "washer 25 is attached to the bottom of the key-surround module having a protrusion 26 which fits into groove 28 of base 27.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 98 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan(6,377,685) in view of Chen(6,717,571).

Krishnan teaches a key surround data input module key board inputting device for inputting data into a computer comprising a non-directional plurality of middle keys(e.g. "1", "2" or 112) for inputting data to a computer(see figures 2, 7; column 1, lines 19-67 and column 24, lines 13-32); a key-arrangement key-surround key(116) surrounding the middle key having input means to input data to a computer(see figures 2, 7-9). Krishnan teaches a key surround key is washer-shaped, circular key-arrangement key having a plurality of actuating contact points(see figures 7-9 and column 19, lines 7-30).

Krishnan fails to disclose a surrounding key is a stationary key.

Chen teach a surrounding key is a stationary key(see figures 1-3; column 1, lines 23-36; column 2, lines 56-68 and column 3, lines 1-26). It would have been obvious to

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have modified Krishnan with the teaching of Chen, so as to reduce the cost of the input key by simplify a sensing device.

11. Claims 100-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan(6,377,685) in view of Chen(6,717,571), Dreher(4,551,717) and Shimauchi(4,812,833).

See the discussion of Krishnan and Chen above. Krishnan as modified fail to disclose an input key having a touch sensitive display screen.

Dreher teaches an input device comprising an LCD display mounted on a key(see figures 1-3 and column 2, lines 48-68). It would have been obvious to have modified Krishnan as modified with the teaching of Dreher, so the value or indication of a key could be easy to change or reprogramming.

Shimauchi teaches a touch sensor above a display(16)(see figures 1-3 and column 2, lines 25-48). It would have been obvious to have modified Krishnan as modified with the teaching of Shimauchi, so a mechanical switch on a key could be replaced by an electronic switch and to reduce the possibility or erroneous input operation when the effective area of key is smaller(see Shimauchi's column 1, lines 34-39).

12. Claims 100-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan(6,377,685) in view of Chen(6,717,571) and Habu(US-20020093488)

See the discussion of Krishnan and Chen above. Krishnan as modified fail to disclose an input key having a touch sensitive display screen.



Habu teaches an input device comprising a touch sensitive display(see figures 1-8 and paragraphs 6, 14, 36, 38 and 41). It would have been obvious to have modified Krishnan as modified with the teaching of Habu, so the value or indication of a key could be easy to change or reprogramming.

### ***Response to Arguments***

13. Applicant's arguments with respect to claims 89-105 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jung(6,657,560) teach a keypad having a middle key and a sounding key.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

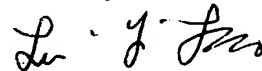
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi Lao whose telephone number is 571-272-7671.

The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 18, 2006



Lun-yi Lao

**Primary Examiner**